Supplementary data

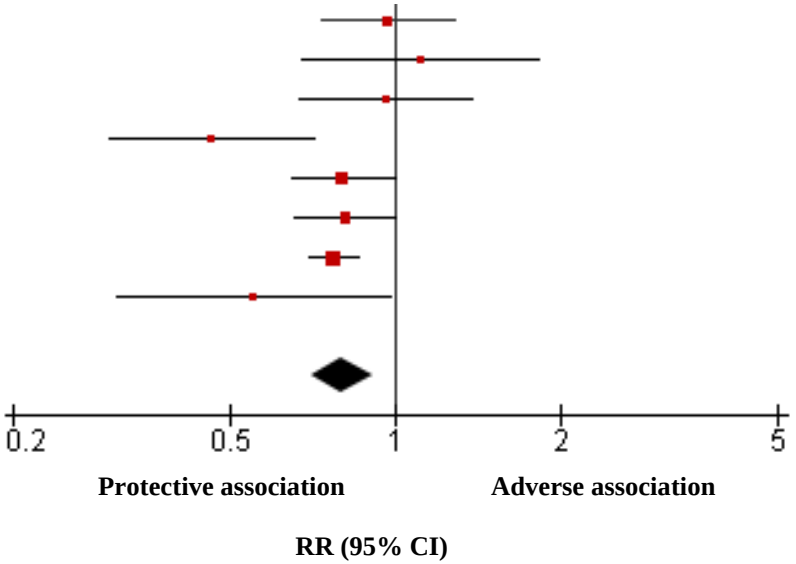
Supplemental table 1. Search strategy (databases and search terms)

MEDLINE (through PUBMED)	
(("dairy"[All Fields] OR "dairy products"[MeSH Terms] OR ("dairy"[All Fields] AND "products"[All Fields])) OR ("milk"[All Fields] OR "milk"[MeSH Terms]) OR ("yogurt"[MeSH Terms] OR "yogurt"[All Fields] OR "yoghurt"[All Fields]) OR ("cheese"[MeSH Terms] OR "cheese"[All Fields]) OR ("cultured milk products"[MeSH Terms] OR ("cultured"[All Fields] AND "milk"[All Fields] AND "products"[All Fields]) OR "cultured milk products"[All Fields] OR ("cultured"[All Fields] AND "milk"[All Fields]) OR "cultured milk"[All Fields])) AND (("colorectal neoplasms"[MeSH Terms] OR ("colorectal"[All Fields] AND "neoplasms"[All Fields]) OR "colorectal neoplasms"[All Fields] OR ("colorectal"[All Fields] AND "cancer"[All Fields]) OR "colorectal cancer"[All Fields]) OR (("neoplasms"[MeSH Terms] OR "neoplasms"[All Fields] OR "cancer"[All Fields]) AND "sigma"[All Fields]) OR (("neoplasms"[MeSH Terms] OR "neoplasms"[All Fields] OR "cancer"[All Fields]) AND "rectal"[All Fields]))	
COCHRANE	
#1	MeSH descriptor: [Colorectal Neoplasms] explode all trees
#2	colorectal
#3	neoplasms
#4	colorectal neoplasms
#5	cancer
#6	colorectal cancer
#7	#2 and #3
#8	#2 and #5
#9	#1 or #4 or #6 or #7 or #8
#10	MeSH descriptor: [Neoplasms] explode all trees
#11	#3 or #5 or #10
#12	sigma
#13	#11 and #12
#14	rectal
#15	#11 and #14
#16	dairy
#17	MeSH descriptor: [Dairy Products] explode all trees
#18	products
#19	#16 and #18
#20	#16 or #17 or #19
#21	milk
#22	MeSH descriptor: [Milk] explode all trees
#23	#21 or #22
#24	MeSH descriptor: [Yogurt] explode all trees
#25	yogurt
#26	yoghurt
#27	#24 or #25 or #26
#28	MeSH descriptor: [Cheese] explode all trees
#29	cheese
#30	#28 or #29
#31	MeSH descriptor: [Cultured Milk Products] explode all trees
#32	cultured
#33	cultured milk products
#34	cultured milk
#35	#18 and #21 and #32
#36	#21 and #32
#37	#31 or #34 or #35 or #36
#38	(#20 or #23 or #27 or #30 or #37) and (#9 or #13 or #15)
SCIENCE DIRECT	
TITLE-ABSTR-KEY((("dairy") OR ("milk") OR ("yogurt") OR ("yoghurt") OR ("cheese")) AND (("cancer" OR "neoplasms") AND (colorectal OR colon OR sigma OR rectum)))	
CINAHL	
S1	colorectal neoplasms
S2	colorectal
S3	neoplasms
S4	colorectal cancer
S5	cancer
S6	s2 AND s3
S7	s2 AND s5
S8	s1 OR s6 OR s4 OR s7
S9	sigma
S10	s3 OR s5
S11	s10 AND s9
S12	rectal
S13	s10 AND s12
S14	dairy
S15	dairy products
S16	products
S17	s14 AND s16
S18	s14 OR s15 OR s17
S19	milk
S20	yogurt
S21	yoghurt
S22	s20 OR s21
S23	cheese
S24	cultured milk products
S25	cultured
S26	milk
S27	products
S28	s25 AND s26 AND s27
S29	S25 AND s26
S30	s24 OR s28 OR s29
S31	s18 OR s19 OR s20 OR s23 OR s30
S32	s8 OR s11 OR s13
S33	s31 AND s32

Study	*n* participants	*n* cases	Weight, %	RR (95% CI)
Terry et al., 2002 (11)	61,643	572	12.7	0.97 (0.73-1.29)
McCullough et al., 2003 W (36)	66,883	262	5.7	1.11 (0.68-1.82)
McCullough et al., 2003 M (36)	60,866	421	9.3	0.96 (0.67-1.38)
Larsson et al., 2006 (17)	45,306	449	7.1	0.46 (0.30-0.71)
Park et al., 2007 M (30)	85,903	1,138	16.9	0.80 (0.64-0.99)
Park et al., 2007 W (30)	105,108	972	17.1	0.81 (0.65-1.00)
Murphy et al., 2013 (18)	477,122	4,513	26.8	0.77 (0.69-0.85)
Barrubés et al., 2018 (19)	7,216	97	4.4	0.55 (0.31-0.98)
Total 95% CI	**910,047**	**8,424**	**100**	**0.80 (0.70-0.91)**

I^2= 45% (P= 0.08)

Test for overall effect: Z= 3.42 (P= 0.0006)

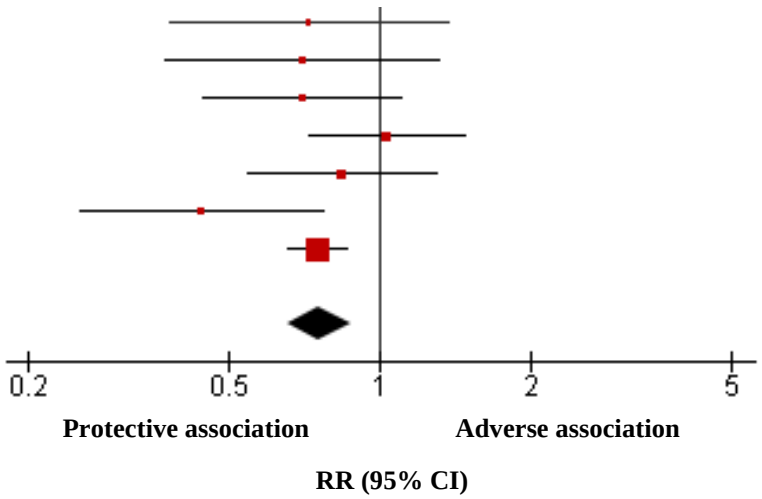


Supplemental figure 1. RRs and 95% CIs (log scale) for fully adjusted random-effects models evaluating the associations between the consumption of total dairy products and the risk of CRC in the meta-analysis of 8 prospective cohort studies (high vs. low intake). The pooled risk estimate is represented by the black diamond. CI: confidence interval, CRC: colorectal cancer, M: only in men, RR: relative risk, W: only in women.

Study	*n* participants	*n* cases	Weight, %	RR (95% CI)
Bostick et al., 1993 (6)	35,216	212	4.8	0.72 (0.38-1.36)
Sellers et al., 1998 FH (35)	4,239	61	5.0	0.70 (0.37-1.31)
Sellers et al., 1998 NFH (35)	22,698	180	8.9	0.70 (0.44-1.11)
Terry et al., 2002 (11)	61,643	371	13.8	1.03 (0.72-1.47)
McCullough et al., 2003 (36)	60,866	302	9.7	0.84 (0.54-1.30)
Larsson et al., 2006 (17)	45,306	276	6.2	0.44 (0.25-0.77)
Murphy et al., 2013 (18)	477,122	2,868	51.6	0.75 (0.66-0.86)
Total 95% CI	**707,090**	**4,270**	**100**	**0.76 (0.66-0.87)**

I^2= 14% (P= 0.33)

Test for overall effect: Z= 3.79 (P= 0.0002)

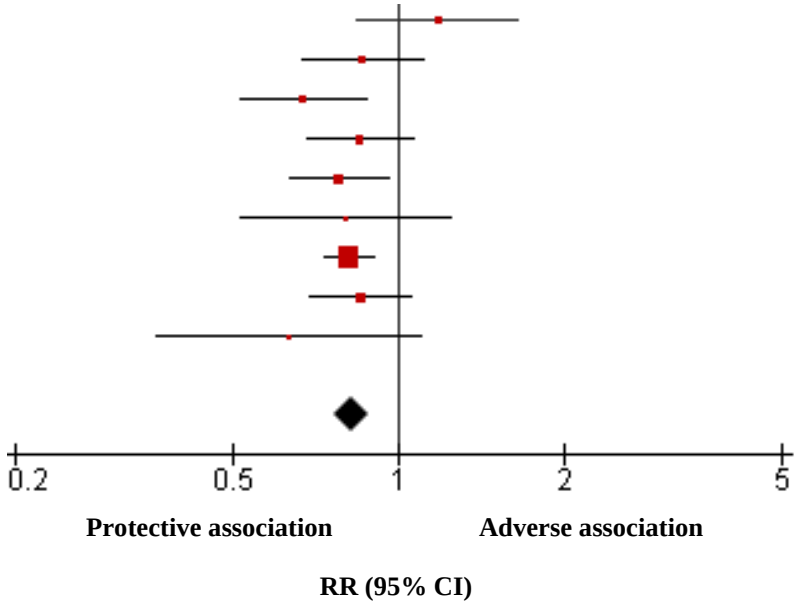


Supplemental figure 2. RRs and 95% CIs (log scale) for fully adjusted random effects models evaluating the associations between the consumption of total dairy products and the risk of colon cancer in the meta-analysis of 7 prospective cohort studies (high vs. low intake). The pooled risk estimate is represented by the black diamond. CI: confidence interval, FH: positive family history of colon cancer, NFH: no family history of colon cancer, RR: relative risk.

Study	*n* participants	*n* cases	Weight, %	RR (95% CI)
McCullough et al., 2003 W (36)	66,883	262	4.5	1.18 (0.84-1.65)
McCullough et al., 2003 M (36)	60,866	421	7.5	0.86 (0.66-1.12)
Larsson et al., 2006 (17)	45,306	449	7.1	0.67 (0.51-0.88)
Park et al., 2007 W (30)	105,108	972	10.3	0.85 (0.68-1.06)
Park et al., 2007 M (30)	85,903	1,138	11.4	0.78 (0.63-0.96)
Lee et al., 2009 (37)	73,224	394	2.7	0.80 (0.52-1.24)
Murphy et al., 2013 (18)	477,122	4,513	43.4	0.81 (0.73-0.90)
Bakken et al., 2018 (32)	81,675	872	11.5	0.85 (0.69-1.05)
Barrubés et al., 2018 (19)	7,216	97	1.6	0.63 (0.36-1.10)
Total 95% CI	**1,003,303**	**9,118**	**100**	**0.82 (0.76-0.88)**

I^2= 2% (P= 0.42)

Test for overall effect: Z= 5.49 (P<0.00001)

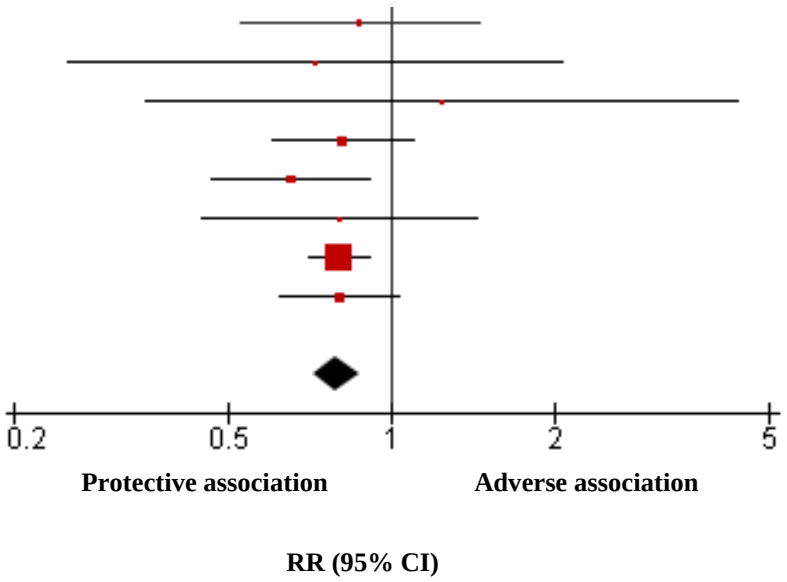


Supplemental figure 3. RRs and 95% CIs (log scale) for fully adjusted random effects models evaluating the associations between the consumption of total milk and the risk of CRC in the meta-analysis of 9 prospective cohort studies (high vs. low intake). The pooled risk estimate is represented by the black diamond. CI: confidence interval, CRC: colorectal cancer, M: only in men, RR: relative risk, W: only in women.

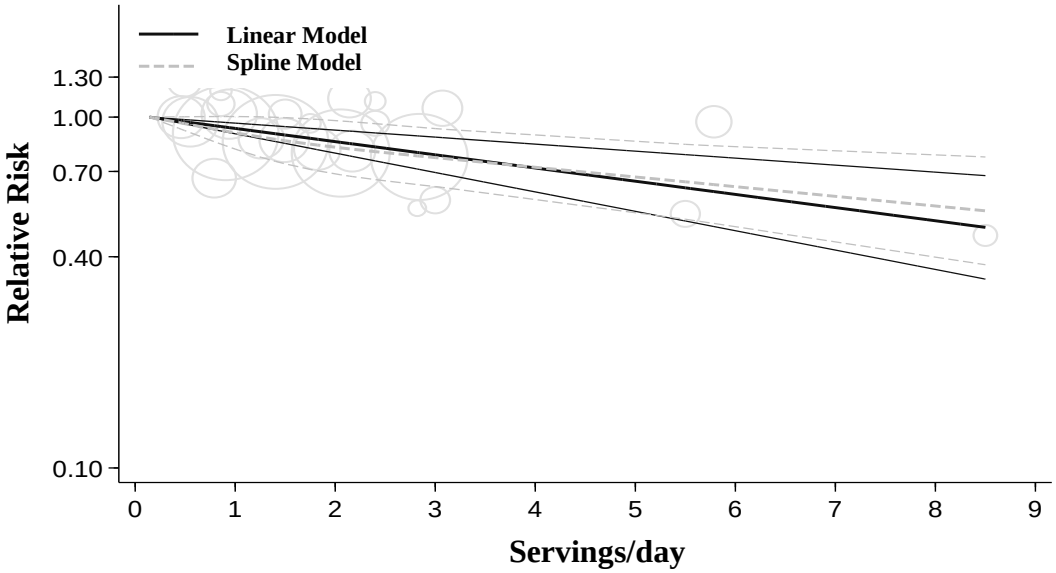
Study	*n* participants	*n* cases	Weight, %	RR (95% CI)
Kearney et al., 1996 (8)	47,935	203	3.8	0.87 (0.52-1.45)
Gaard et al., 1996 M (33)	25,638	84	0.9	0.72 (0.25-2.07)
Gaard et al., 1996 W (33)	24,897	63	0.6	1.24 (0.35-4.40)
McCullough et al., 2003 (36)	60,866	302	10.7	0.81 (0.60-1.10)
Larsson et al., 2006 (17)	45,306	276	8.5	0.65 (0.46-0.91)
Lee et al., 2009 (37)	73,224	236	2.8	0.80 (0.44-1.44)
Murphy et al., 2013 (18)	477,122	2,868	57.3	0.80 (0.70-0.91)
Bakken et al., 2018 (32)	81,675	617	15.3	0.80 (0.62-1.03)
Total 95% CI	**836,663**	**4,649**	**100**	**0.79 (0.72-0.87)**

I^2= 0% (P= 0.96)

Test for overall effect: Z= 4.63 (P<0.00001)

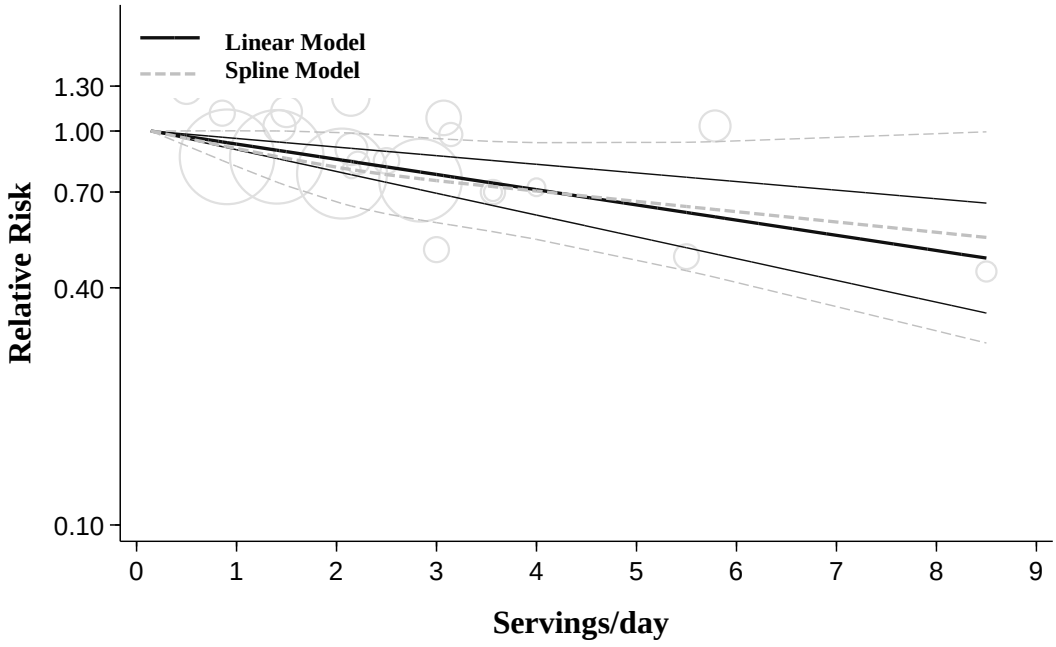


Supplemental figure 4. RRs and 95% CIs (log scale) for fully adjusted random effects models evaluating the associations between the consumption of total milk and the risk of colon cancer in the meta-analysis of 8 prospective cohort studies (high vs. low intake). The pooled risk estimate is represented by the black diamond. CI: confidence interval, M: only in men, RR: relative risk, W: only in women.



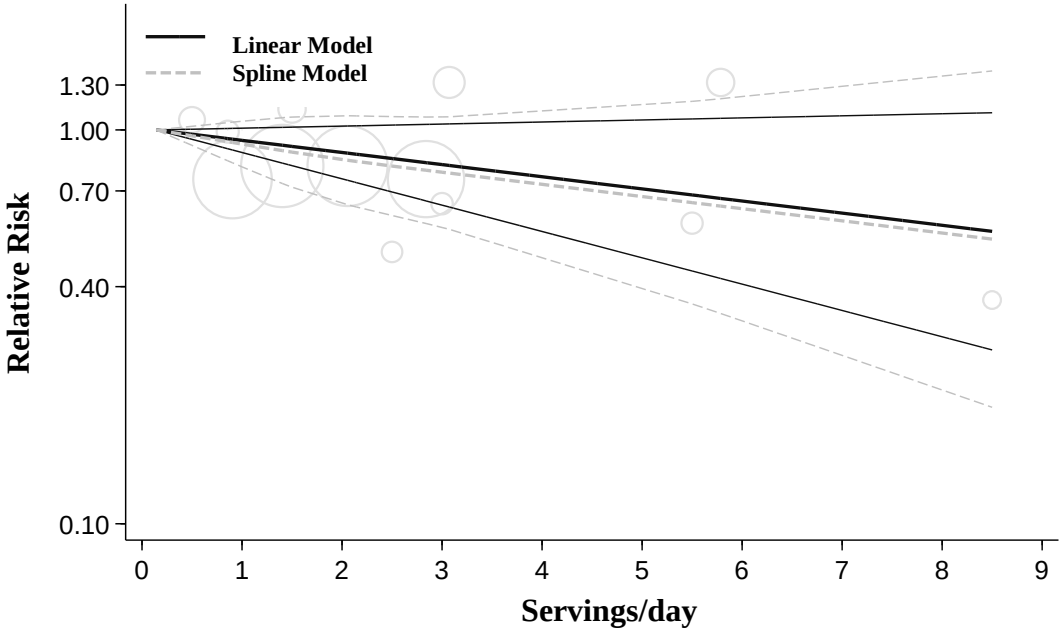
Linear RR per 1 serving increment: 0.92 [95%CI, 0.88 to 0.96]; *P*<0.001.
Departure from linearity= 0.420. Random effects dose-response model

Supplemental figure 5. Linear and nonlinear dose-response analysis of the association between an increase of one serving/day of total dairy products and the risk of colorectal cancer. Each study was centered on the baseline reference dose for the estimation of risk for dose increases.



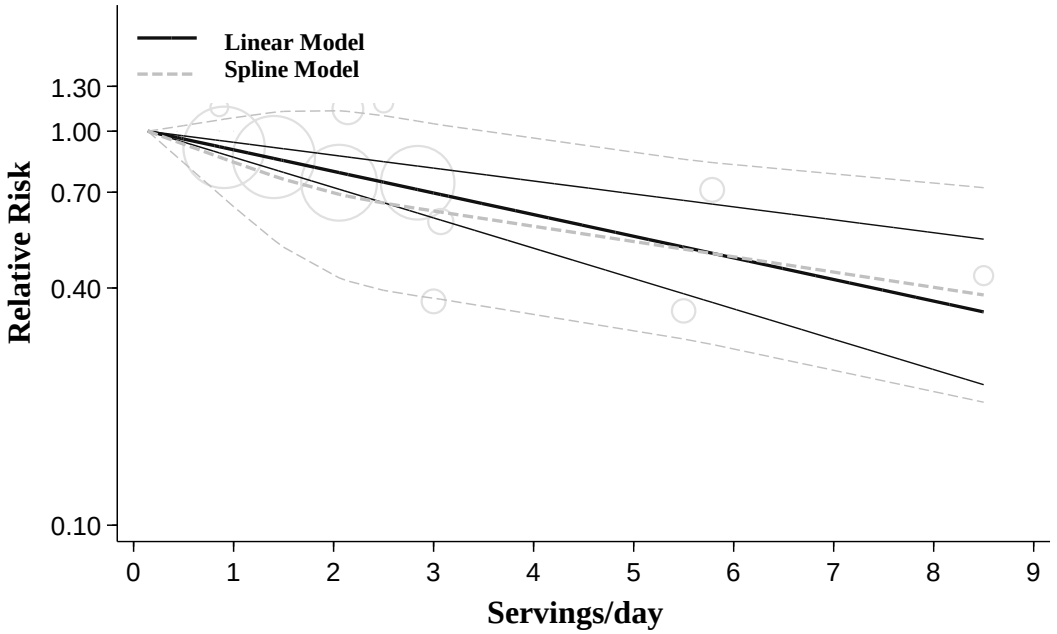
Linear RR per 1 serving increment: 0.91 [95%CI, 0.88 to 0.95]; *P*<0.001.
Departure from linearity= 0.471. Random effects dose-response model.

Supplemental figure 6. Linear and nonlinear dose-response analysis of the association between an increase of one serving/day of total dairy products and the risk of colon cancer. Each study was centered on the baseline reference dose for the estimation of risk for dose increases.



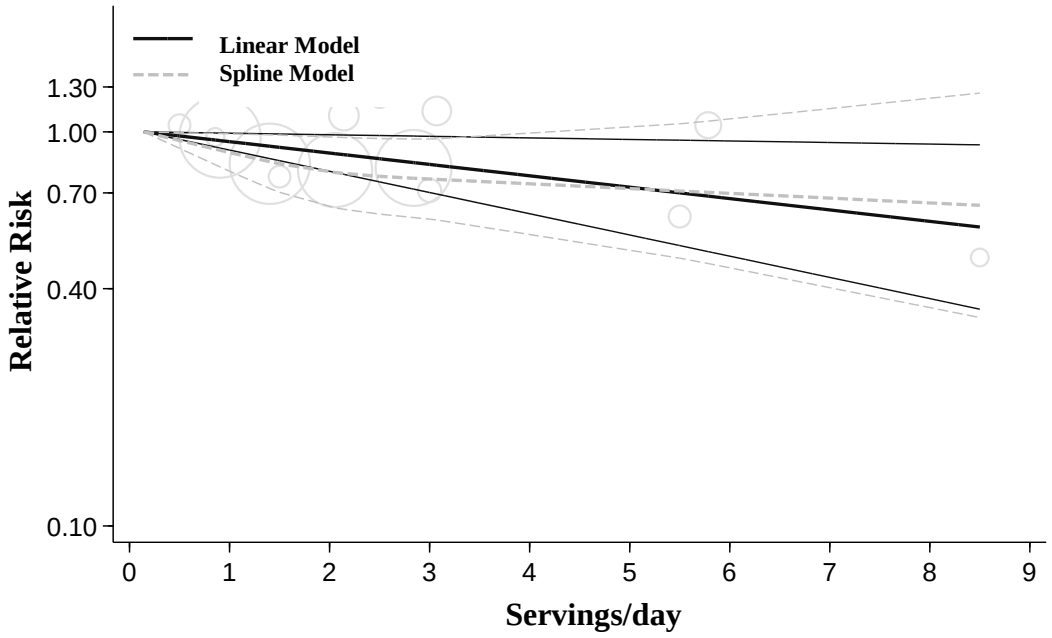
Linear RR per 1 serving increment: 0.93 [95%CI, 0.86 to 1.01]; *P*=0.094
Departure from linearity= 0.805. Random effects dose-response model

Supplemental figure 7. Linear and nonlinear dose-response analysis of the association between an increase of one serving/day of total dairy products and the risk of proximal colon cancer. Each study was centered on the baseline reference dose for the estimation of risk for dose increases.



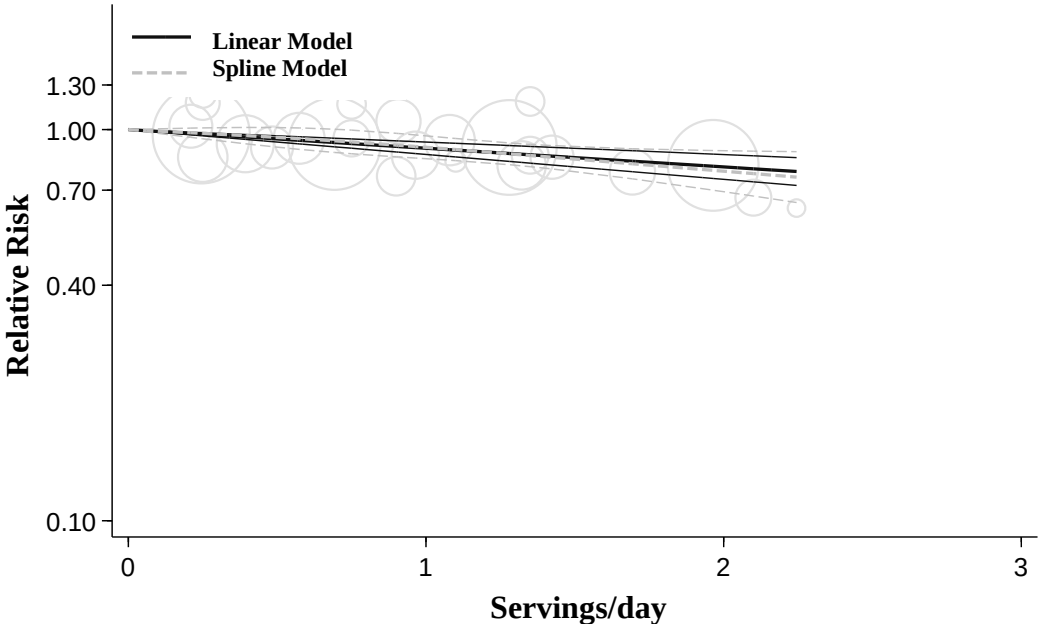
Linear RR per 1 serving increment: 0.88 [95%CI, 0.84 to 0.93]; *P*<0.001
Departure from linearity= 0.473. Random effects dose-response model

Supplemental figure 8. Linear and nonlinear dose-response analysis of the association between an increase of one serving/day of total dairy products and the risk of distal colon cancer. Each study was centered on the baseline reference dose for the estimation of risk for dose increases.



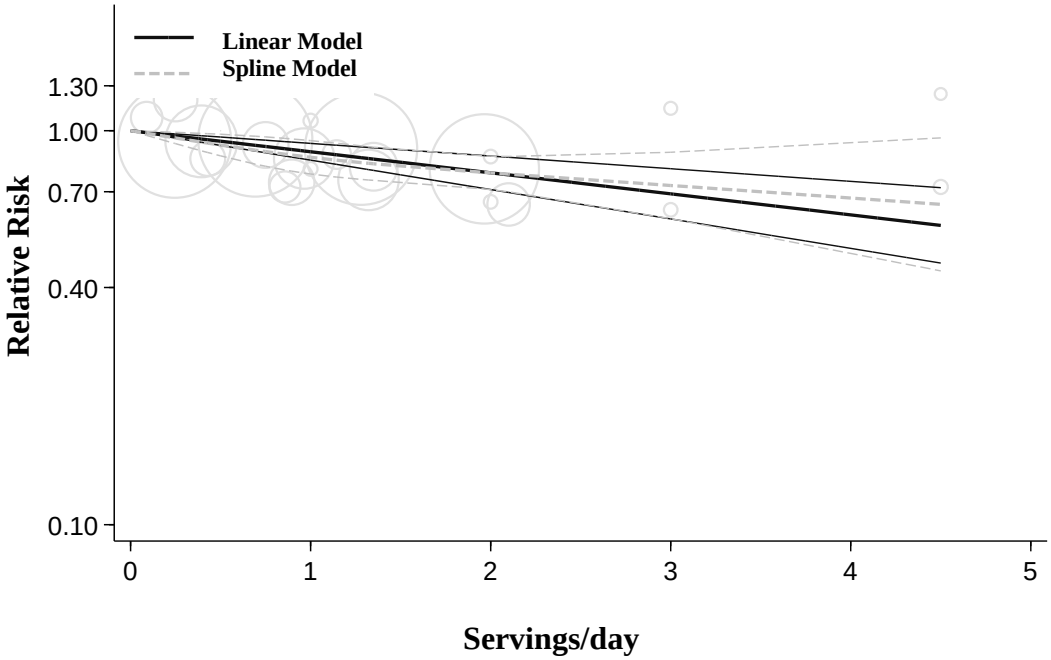
Linear RR per 1 serving increment: 0.94 [95%CI, 0.88 to 0.99]; *P*=0.023
Departure from linearity= 0.194. Random effects dose-response model

Supplemental figure 9. Linear and nonlinear dose-response analysis between increasing one serving/day of total dairy products and the risk of rectal cancer. Each study was centered on the baseline reference dose for the estimation of risk for dose increases.



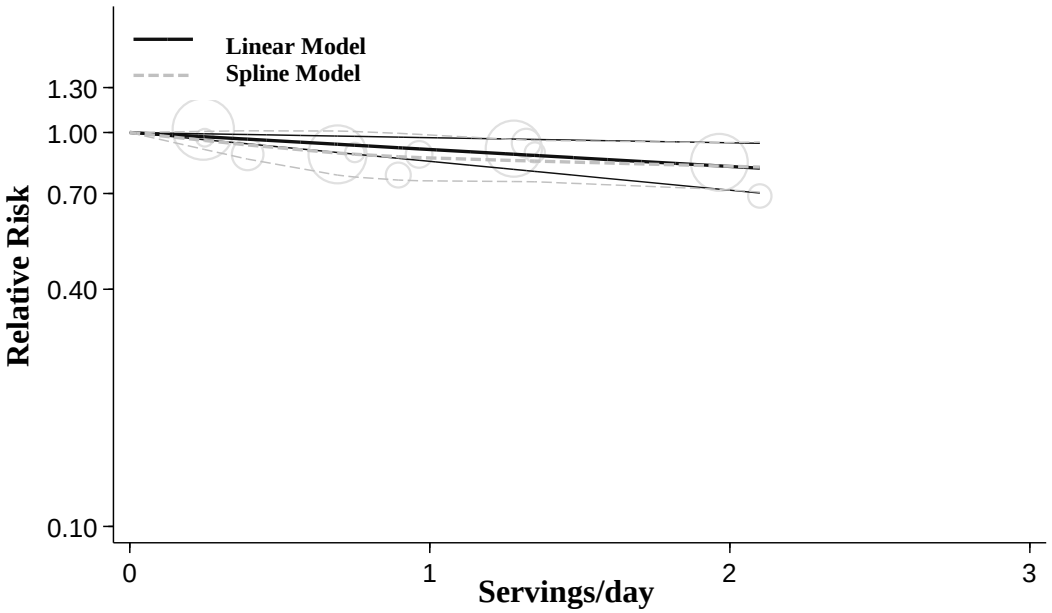
Linear RR per 1 serving increment: 0.90 [95%CI, 0.86 to 0.93]; *P*<0.001
Departure from linearity= 0.666. Random effects dose-response model

Supplemental figure 10. Linear and nonlinear dose-response analysis of the association between an increase of one serving/day of total milk and the risk of colorectal cancer. Each study was centered on the baseline reference dose for the estimation of risk for dose increases.



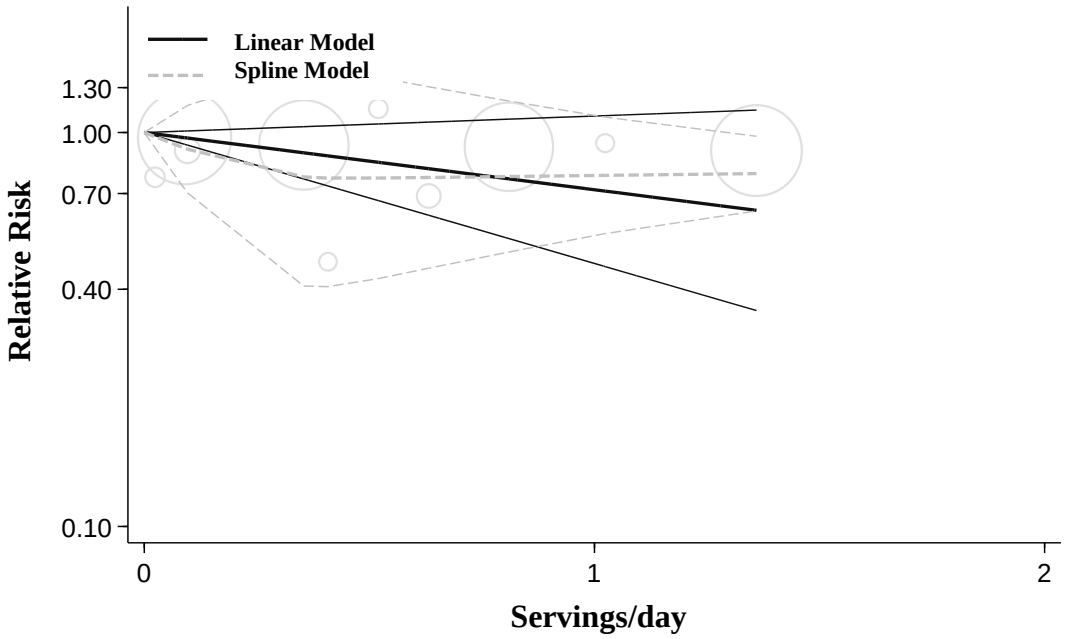
Linear RR per 1 serving increment: 0.88 [95%CI, 0.84 to 0.93]; *P*<0.001
Departure from linearity= 0.452. Random effects dose-response model

Supplemental figure 11. Linear and nonlinear dose-response analysis of the association between an increase of one serving/day of total milk and the risk of colon cancer. Each study was centered on the baseline reference dose for the estimation of risk for dose increases.



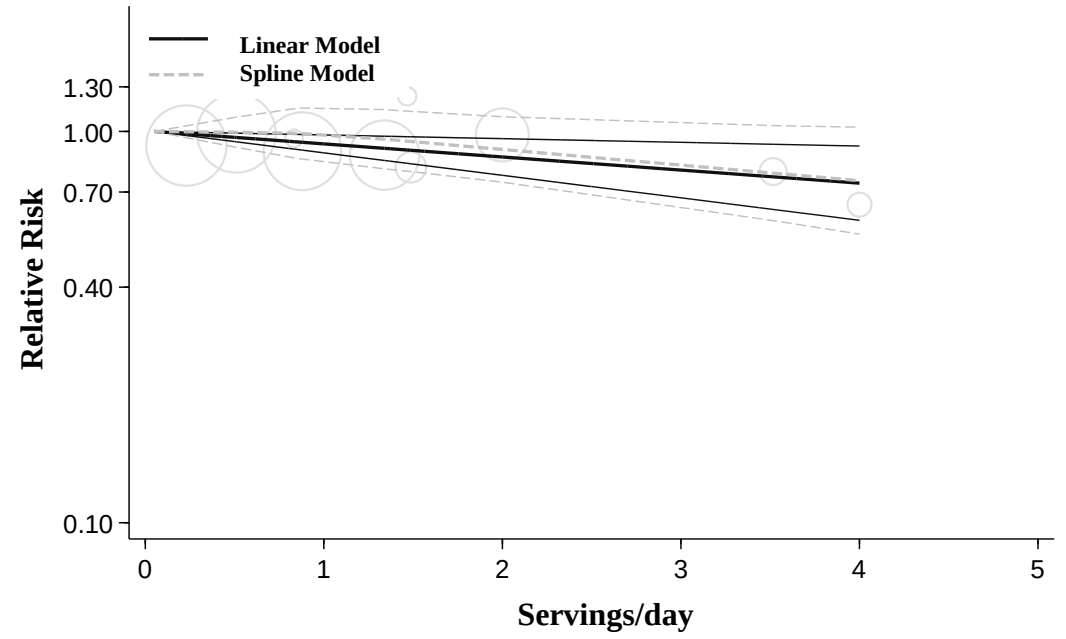
Linear RR per 1 serving increment: 0.91 [95%CI, 0.84 to 0.97]; *P*<0.01
Departure from linearity= 0.399. Random effects dose-response model

Supplemental figure 12. Linear and nonlinear dose-response analysis of the association between an increase of one serving/day of total milk and the risk of rectal cancer. Each study was centered on the baseline reference dose for the estimation of risk for dose increases.



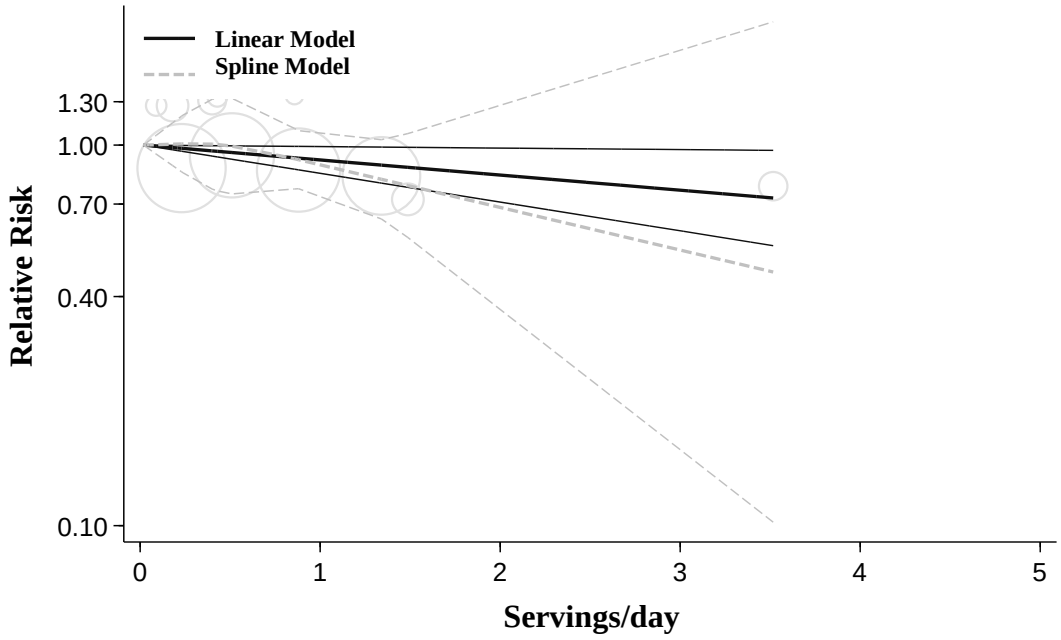
Linear RR per 1 serving increment: 0.72 [95% CI, 0.47 to 1.10]; *P*=0.128
Departure from linearity= 0.521. Random effects dose-response model

Supplemental figure 13. Linear and nonlinear dose-response analysis of the association between an increase of one serving/day of total yogurt consumption and the risk of colorectal cancer. Each study was centered on the baseline reference dose for the estimation of risk for dose increases.



Linear RR per 1 serving increment: 0.93 [95% CI, 0.88 to 0.98]; *P*<0.01
Departure from linearity= 0.458. Random effects dose-response model

Supplemental figure 14. Linear and nonlinear dose-response analysis of the association between an increase of one serving/day of total cheese and the risk of colorectal cancer. Each study was centered on the baseline reference dose for the estimation of risk for dose increases.



Linear RR per 1 serving increment: 0.91 [95% CI, 0.84 to 0.99]; *P*=0.030
Departure from linearity= 0.678. Random effects dose-response model

Supplemental figure 15. Linear and nonlinear dose-response analysis of the association between an increase of one serving/day of total cheese consumption and the risk of colon cancer. Each study was centered on the baseline reference dose for the estimation of risk for dose increases.

Supplemental table 2. Sensitivity analysis excluding one study at a time (cohort studies)

TOTAL DAIRY			
Colorectal cancer (RR [95% CI]= 0.80 [0.70, 0.91], I^2 (%)= 45, *P*-value= 0.08)			
Excluded study or subgroup	**RR (95% CI)**	**I^2 (%)**	***P*-value**
Terry et al., 2002 (only women) (11)	0.77 (0.68, 0.89)	43	0.10
McCullough et al., 2003 (men) (36)	0.78 (0.68, 0.90)	48	0.07
Mc Cullough et al., 2003 (women) (36)	0.78 (0.69, 0.89)	45	0.09
Larsson et al., 2006 (only men) (17)	0.81 (0.74, 0.89)	8	0.36
Park et al., 2007 (men) (30)	0.80 (0.68, 0.93)	53	0.05
Park et al., 2007 (women) (30)	0.79 (0.68, 0.93)	53	0.05
Murphy et al., 2013 (18)	0.80 (0.67, 0.96)	51	0.06
Barrubés et al., 2018 (19)	0.81 (0.71, 0.92)	47	0.08
Colon (RR [95% CI]= 0.76 [0.66, 0.87], I^2 (%)= 14, *P*-value= 0.33)			
Excluded study or subgroup	**RR (95% CI)**	**I^2 (%)**	***P*-value**
Bostick et al., 1993 (6)	0.76 (0.64, 0.90)	28	0.23
Sellers et al., 1998 (positive family history) (35)	0.76 (0.64, 0.90)	27	0.23
Sellers et al., 1998 (no family history) (35)	0.76 (0.64, 0.91)	27	0.23
Terry et al., 2002 (only women) (11)	0.73 (0.65, 0.82)	0	0.58
McCullough et al., 2003 (men) (36)	0.75 (0.62, 0.89)	26	0.24
Larsson et al., 2006 (only men) (17)	0.77 (0.69, 0.87)	0	0.68
Murphy et al., 2013 (18)	0.75 (0.60, 0.95)	27	0.23
Proximal colon (RR [95% CI]= 0.75 [0.63, 0.89], I^2 (%)= 63, *P*-value= 0.04)			
Excluded study or subgroup	**RR (95% CI)**	**I^2 (%)**	***P*-value**
Terry et al., 2002 (only women) (11)	0.71 (0.59, 0.85)	44	0.17
McCullough et al., 2003 (men) (36)	0.77 (0.65, 0.92)	70	0.04
Larsson et al., 2006 (only men) (17)	0.78 (0.65, 0.93)	62	0.07
Murphy et al., 2013 (18)	0.77 (0.52, 1.13)	75	0.02
Distal colon (RR [95% CI]= 0.73 [0.62, 0.88], I^2 (%)= 10, *P*-value= 0.34)			
Excluded study or subgroup	**RR (95% CI)**	**I^2 (%)**	***P*-value**
Terry et al., 2002 (only women) (11)	0.74 (0.61, 0.88)	40	0.19
McCullough et al., 2003 (men) (36)	0.72 (0.60, 0.86)	0	0.41
Larsson et al., 2006 (only men) (17)	0.76 (0.63, 0.91)	0	0.50
Murphy et al., 2013 (18)	0.71 (0.47, 1.07)	39	0.19
Rectum (RR [95% CI]= 0.83 [0.71, 0.96], I^2 (%)= 32, *P*-value= 0.22)			
Excluded study or subgroup	**RR (95% CI)**	**I^2 (%)**	***P*-value**
Terry et al., 2002 (only women) (11)	0.81 (0.69, 0.95)	43	0.17
McCullough et al., 2003 (men) (36)	0.81 (0.70, 0.95)	33	0.23
Larsson et al., 2006 (only men) (17)	0.48 (0.23, 1.00)	8	0.34
Murphy et al., 2013 (18)	0.92 (0.65, 1.29)	50	0.13
HIGH-FAT DAIRY			
Colon cancer (RR [95% CI]= 0.82 [0.62, 1.08], I^2 (%)= 0, *P*-value= 0.77)			
Excluded study or subgroup	**RR (95% CI)**	**I^2 (%)**	***P*-value**
Bostick et al., 1993 (6)	0.83 (0.60, 1.15)	0	0.48
Sellers et al., 1998 (no family history) (35)	0.74 (0.50, 1.11)	0	0.79
Sellers et al., 1998 (positive family history) (35)	0.86 (0.63, 1.18)	0	0.68

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LOW-FAT DAIRY			
Colon cancer (RR [95% CI]= 0.91 [0.72, 1.15], I^2 (%)= 0, *P*-value= 0.68)			
Excluded study or subgroup	**RR (95% CI)**	**I^2 (%)**	***P*-value**
Sellers et al., 1998 (no family history) (35)	0.98 (0.73, 1.32)	0	0.74
Sellers et al., 1998 (positive family history) (35)	0.91 (0.71, 1.18)	0	0.38
Terry et al., 2002 (only women) (11)	0.83 (0.60, 1.15)	0	0.74
TOTAL MILK			
Colorectal cancer (RR [95% CI]= 0.82 [0.76, 0.88], I^2 (%)= 2, *P*-value= 0.42)			
Excluded study or subgroup	**RR (95% CI)**	**I^2 (%)**	***P*-value**
McCullough et al., 2003 (men) (36)	0.82 (0.75, 0.89)	12	0.33
Mc Cullough et al., 2003 (women) (36)	0.80 (0.75, 0.86)	0	0.85
Larsson et al., 2006 (only men) (17)	0.83 (0.77, 0.89)	0	0.56
Park et al., 2007 (women)	0.82 (0.75, 0.89)	13	0.33
Park et al., 2007 (men) (30)	0.82 (0.76, 0.90)	12	0.34
Lee et al., 2009 (only women) (37)	0.82 (0.75, 0.89)	14	0.32
Murphy et al., 2013 (18)	0.82 (0.74, 0.91)	13	0.33
Bakken et al., 2018 (32)	0.81 (0.75, 0.89)	12	0.33
Barrubés et al., 2018 (19)	0.82 (0.76, 0.88)	4	0.40
Colon cancer (RR [95% CI]= 0.79 [0.72, 0.87], I^2 (%)= 0, *P*-value= 0.96)			
Excluded study or subgroup	**RR (95% CI)**	**I^2 (%)**	***P*-value**
Kearney et al., 1996 (only men) (8)	0.79 (0.71, 0.87)	0	0.93
Gaard et al., 1996 (33)	0.79 (0.71, 0.87)	0	0.92
McCullough et al., 2003 (men) (36)	0.79 (0.71, 0.87)	0	0.92
Larsson et al., 2006 (only men) (17)	0.80 (0.72, 0.89)	0	1.00
Lee et al., 2009 (only women) (37)	0.79 (0.71, 0.87)	0	0.91
Murphy et al., 2013 (18)	0.80 (0.70, 0.91)	0	0.93
Bakken et al., 2018 (32)	0.79 (0.71, 0.88)	0	0.92
Proximal cancer (RR [95% CI]= 0.81 [0.68, 0.96], I^2 (%)= 0, *P*-value= 0.70)			
Excluded study or subgroup	**RR (95% CI)**	**I^2 (%)**	***P*-value**
McCullough et al., 2003 (men) (36)	0.81 (0.68, 0.96)	0	0.70
Larsson et al., 2006 (only men) (17)	0.81 (0.68, 0.98)	0	0.42
Murphy et al., 2013 (18)	0.71 (0.50, 1.02)	0	0.76
Distal colon (RR [95% CI]= 0.75 [0.63, 0.90], I^2 (%)= 25, *P*-value= 0.26)			
Excluded study or subgroup	**RR (95% CI)**	**I^2 (%)**	***P*-value**
McCullough et al., 2003 (men) (36)	0.73 (0.60, 0.89)	51	0.15
Larsson et al., 2006 (only men) (17)	0.80 (0.66, 0.97)	0	0.57
Murphy et al., 2013 (18)	0.68 (0.47, 0.97)	55	0.14
Rectum (RR [95% CI]= 0.84 [0.73, 0.97], I^2 (%)= 0, *P*-value= 0.84)			
Excluded study or subgroup	**RR (95% CI)**	**I^2 (%)**	***P*-value**
McCullough et al., 2003 (men) (36)	0.84 (0.72, 0.97)	0	0.71
Larsson et al., 2006 (only men) (17)	0.86 (0.74, 1.00)	0	0.91
Lee et al., 2009 (only women) (37)	0.84 (0.73, 0.97)	0	0.70
Murphy et al., 2013 (18)	0.84 (0.67, 1.07)	0	0.70
Bakken et al., 2018 (32)	0.82 (0.71, 0.96)	0	0.85
WHOLE-MILK			
Colorectal cancer (RR [95% CI]= 0.97 [0.86, 1.09], I^2 (%)= 40, *P*-value= 0.19)			

Supplementary data

Excluded study or subgroup	**RR (95% CI)**	**I^2 (%)**	***P*-value**
Larsson et al., 2005 (only women) (14)	0.88 (0.75, 1.04)	0	0.44
Murphy et al., 2013 (18)	1.08 (0.91, 1.28)	0	0.95
Barrubés et al., 2018 (19)	0.96 (0.85, 1.09)	69	0.07
TOTAL YOGURT			
Colorectal cancer (RR [95% CI]= 0.87 [0.79, 0.96], I^2 (%)= 57, *P*-value= 0.07)			
Excluded study or subgroup	**RR (95% CI)**	**I^2 (%)**	***P*-value**
Pala et al., 2011 (women) (38)	0.88 (0.80, 0.97)	64	0.06
Pala et al., 2011 (men) (38)	0.89 (0.81, 0.98)	0	0.43
Murphy et al., 2013 (18)	0.68 (0.52, 0.89)	40	0.19
Barrubés et al., 2018 (19)	0.87 (0.79, 0.95)	71	0.03
CHEESE			
Colorectal cancer (RR [95% CI]= 0.85 [0.76, 0.96], I^2 (%)= 27, *P*-value= 0.25)			
Excluded study or subgroup	**RR (95% CI)**	**I^2 (%)**	***P*-value**
Larsson et al., 2005 (only women) (14)	0.88 (0.78, 0.99)	2	0.36
Larsson et al., 2006 (only men) (17)	0.86 (0.76, 0.97)	48	0.14
Murphy et al., 2013 (18)	0.81 (0.64, 1.02)	47	0.15
Barrubés et al., 2018 (19)	0.84 (0.74, 0.94)	2	0.36

Supplemental table 3. Sensitivity analysis excluding one study at a time (case-control studies)

TOTAL DAIRY			
Colorectal cancer (RR [95% CI]= 0.87 [0.64, 1.20], I^2 (%)= 52, *P*-value= 0.08)			
Excluded study or subgroup	**OR (95% CI)**	**I^2 (%)**	***P*-value**
Centonze et al., 1994 (40)	0.94 (0.66, 1.34)	60	0.06
Mizoue et al., 2008 (46)	0.93 (0.61, 1.42)	64	0.04
Sun et al., 2011 NL (48)	0.89 (0.59, 1.34)	64	0.04
Sun et al., 2011 ON (48)	0.94 (0.59, 1.51)	62	0.05
Chun et al., 2015 (50)	0.78 (0.64, 0.94)	0	0.84
Colon cancer (RR [95% CI]= 0.84 [0.71, 1.00], I^2 (%)= 40, *P*-value= 0.11)			
Excluded study or subgroup	**OR (95% CI)**	**I^2 (%)**	***P*-value**
Shannon et al., 1996 (women) (42)	0.88 (0.77, 1.01)	6	0.38
Shannon et al., 1996 (men) (42)	0.83 (0.69, 1.01)	48	0.07
Kampman et al., 2000 (men) (44)	0.84 (0.69, 1.04)	47	0.08
Kampman et al., 2000 (women) (44)	0.87 (0.72, 1.06)	36	0.15
Satia Abouta et al., 2004 Caucasian (45)	0.83 (0.68, 1.01)	48	0.07
Satia Abouta et al., 2004 African (45)	0.84 (0.69, 1.02)	48	0.07
Murtaugh et al., 2006 Ff/ff (28)	0.79 (0.68, 0.93)	11	0.35
Murtaugh et al., 2006 FF (28)	0.82 (0.67, 1.00)	46	0.09
Rectal cancer (RR [95% CI]= 0.63 [0.50, 0.80], I^2 (%)= 43, *P*-value= 0.15)			
Excluded study or subgroup	**OR (95% CI)**	**I^2 (%)**	***P*-value**
Murtaugh et al., 2006 FF (28)	0.59 (0.45, 0.78)	55	0.11
Murtaugh et al., 2006 Ff/ff (28)	0.62 (0.47, 0.82)	62	0.07
Williams et al., 2009 Whites (47)	0.75 (0.56, 1.01)	0	0.44
Williams et al., 2009 African (47)	0.60 (0.47, 0.76)	26	0.26
HIGH-FAT DAIRY			
Colon cancer (RR [95% CI]= 1.11 [0.90, 1.37], I^2 (%)= 53, *P*-value= 0.06)			
Excluded study or subgroup	**OR (95% CI)**	**I^2 (%)**	***P*-value**
Shannon et al., 1996 (women) (42)	1.12 (0.89, 1.41)	60	0.04
Shannon et al., 1996 (men) (42)	1.17 (0.95, 1.43)	49	0.10
Kampman et al., 2000 (women) (44)	1.16 (0.93, 1.46)	49	0.10
Kampman et al., 2000 (men) (44)	1.09 (0.84, 1.42)	61	0.03
Murtaugh et al., 2006 Ff/ff (28)	1.04 (0.88, 1.22)	0	0.52
Murtaugh et al., 2006 FF (28)	1.07 (0.81, 1.41)	62	0.03
LOW-FAT DAIRY			
Colon cancer (RR [95% CI]= 0.85 [0.71, 1.02], I^2 (%)= 24, *P*-value= 0.26)			
Excluded study or subgroup	**OR (95% CI)**	**I^2 (%)**	***P*-value**
Shannon et al., 1996 (women) (42)	0.88 (0.73, 1.06)	23	0.27
Shannon et al., 1996 (men) (42)	0.83 (0.67, 1.02)	36	0.18
Kampman et al., 2000 (women) (44)	0.89 (0.73, 1.09)	19	0.29
Kampman et al., 2000 (men) (44)	0.86 (0.66, 1.10)	35	0.19
Murtaugh et al., 2006 FF (28)	0.85 (0.69, 1.04)	38	0.17
Murtaugh et al., 2006 Ff/ff (28)	0.77 (0.64, 0.92)	0	0.76

TOTAL MILK			
Colorectal cancer (RR [95% CI]= 0.85 [0.73, 0.99], I^2 (%)= 0, *P*-value= 0.50)			
Excluded study or subgroup	**OR (95% CI)**	**I^2 (%)**	***P*-value**
Lee et al., 1989 (39)	0.84 (0.71, 0.99)	3	0.40
Centonze et al., 1994 (40)	0.86 (0.74, 0.99)	0	0.43
Boutron et al., 1996 (31)	0.83 (0.72, 0.97)	0	0.51
Boutron-Ruault M-C et al., 1999 (43)	0.84 (0.72, 0.98)	0	0.42
Mizoue et al., 2008 (46)	0.90 (0.76, 1.05)	0	0.78
Sun et al., 2011 ON (48)	0.89 (0.74, 1.06)	0	0.46
Sun et al., 2011 NL (48)	0.84 (0.72, 0.98)	2	0.41
Green et al., 2014 (49)	0.82 (0.70, 0.96)	0	0.52
Rectal cancer (RR [95% CI]= 0.88 [0.69, 1.13], I^2 (%)= 40, *P*-value= 0.17)			
Excluded study or subgroup	**OR (95% CI)**	**I^2 (%)**	***P*-value**
Lee et al., 1989 (39)	0.84 (0.64, 1.10)	54	0.11
Williams et al., 2009 African (47)	0.88 (0.67, 1.14)	60	0.08
Williams et al., 2009 Whites (47)	1.13 (0.81, 1.59)	0	0.79
Green et al., 2014 (49)	0.77 (0.58, 1.03)	9	0.34
TOTAL YOGURT			
Colorectal cancer (RR [95% CI]= 0.92 [0.77, 1.09], I^2 (%)= 0, *P*-value= 0.32)			
Excluded study or subgroup	**OR (95% CI)**	**I^2 (%)**	***P*-value**
Boutron et al., 1996 (31)	0.91 (0.75, 1.09)	0	0.35
Sun et al., 2011 ON (48)	1.01 (0.78, 1.32)	0	0.95
Sun et al., 2011 NL (48)	0.87 (0.71, 1.07)	0	0.56
Colon cancer (RR [95% CI]= 1.06 [0.90, 1.25], I^2 (%)= 25, *P*-value= 0.26)			
Excluded study or subgroup	**OR (95% CI)**	**I^2 (%)**	***P*-value**
Kampman et al., 1994 (41)	1.03 (0.89, 1.20)	14	0.32
Shannon et al., 1996 (women) (42)	1.09 (0.95, 1.23)	0	0.50
Shannon et al., 1996 (men) (42)	1.04 (0.86, 1.26)	39	0.18
Kampman et al., 2000 (men) (44)	1.04 (0.79, 1.38)	40	0.17
Kampman et al., 2000 (women) (44)	1.09 (0.83, 1.43)	38	0.19
CHEESE			
Colorectal cancer (RR [95% CI]= 0.95 [0.79, 1.14], I^2 (%)= 0, *P*-value= 0.62)			
Excluded study or subgroup	**OR (95% CI)**	**I^2 (%)**	***P*-value**
Centonze et al., 1994 (40)	0.97 (0.80, 1.18)	0	0.60
Boutron et al., 1996 (31)	0.93 (0.76, 1.13)	0	0.55
Boutron-Ruault M-C et al., 1999 (43)	0.95 (0.78, 1.16)	0	0.45
Sun et al., 2011 NL (48)	0.90 (0.74, 1.11)	0	0.74
Sun et al., 2011 ON (48)	1.02 (0.76, 1.35)	0	0.52
Colon cancer (RR [95% CI]= 0.87 [0.74, 1.02], I^2 (%)= 0, *P*-value= 0.4)			
Excluded study or subgroup	**OR (95% CI)**	**I^2 (%)**	***P*-value**
Kampman et al., 1994 (41)	0.84 (0.71, 1.00)	0	0.51

Kampman et al., 2000 (men) (44)	0.85 (0.69, 1.04)	42	0.19
Kampman et al., 2000 (women) (44)	0.95 (0.75, 1.21)	0	0.38